

REMARKS/ARGUMENTS

Claims 1-32 are pending.

Claims 2, 8-14, 16, 22-28, 30 and 32 are withdrawn from consideration.

Claims 1, 3-7, 15, 17-21, 29 and 31 are rejected.

Claims 1, 15, 29 and 31 have been amended. Support for these amendments can be found throughout the specification and drawings, as originally filed.

This response is submitted in response to a Final Office Action. The Applicant submits that the instant response places the application in a condition for allowance, or alternatively, in better form for appeal.

35 USC §103(a) REJECTION

Claims 1, 6, 15, 20, 29 and 31 stand rejected under 35 USC §103(a) as being anticipated by U.S. Patent No. 5,951,381 to Videcoq, et al. in view of 5,846,125 to Robichon.

The Applicants respectfully traverse the 35 USC §103(a) rejection of claims 1, 6, 15, 20, 29 and 31.

The standard for obviousness is that there must be some suggestion, either in the reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. In addition, "[s]omething in the prior art as a whole must suggest the desirability and, thus, the obviousness, of making" the modification to the art suggested by the Examiner. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 U.S.P.Q.2d (BNA) 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). Although the Examiner may suggest the teachings of a primary reference could be modified to

arrive at the claimed subject matter, the modification is not obvious unless the prior art also suggests the desirability of such modification. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d (BNA) 1397, 1398 (Fed. Cir. 1989). There must be a teaching in the prior art for the proposed combination or modification to be proper. *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d (BNA) 1248 (Fed. Cir. 1989). If the prior art fails to provide this necessary teaching, suggestion, or incentive supporting the Examiner's suggested modification, the rejection based upon this suggested modification is error and must be reversed. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d (BNA) 1566 (Fed. Cir. 1990).

The law is also clear that a claim in dependent form shall be construed to incorporate all the limitations of the claim to which it refers. 35 U.S.C. § 112 ¶ 4.

In the interests of expediting the prosecution, and without admission that any amendment is necessary, the Applicant has amended claim 1 to recite, a rotary edging wheel for rough cutting of an optical lens, comprising: (1) a hub portion operable for attachment to a rotary power source, wherein said hub portion includes a substantially solid body member; (2) an outer circumferential rough cutting surface having a width, wherein said surface is adjacent to said body member, said surface including an abrasive grit attached thereto, wherein said abrasive grit is operable for rough cutting of the optical lens, wherein said abrasive grit is present at a substantially level depth across the width of said surface; and (3) at least one pair of substantially adjacent swarf clearing grooves formed in said surface, comprising: (i) a first swarf clearing groove extending at an angle across said surface; and (ii) a second swarf clearing groove extending at an angle across said surface, wherein said first and second swarf clearing grooves are angled either towards each other or away from each other and extend

continuously across said surface, wherein said first and second swarf clearing grooves are operable to remove swarf during a rough cutting operation of the optical lens.

In the interests of expediting the prosecution, and without admission that any amendment is necessary, the Applicant has amended claim 15 to recite, a rotary edging wheel for polishing of an optical lens, comprising: (1) a hub portion operable for attachment to a rotary power source, wherein said hub portion includes a substantially solid body member; (2) an outer circumferential cutting surface having a width, wherein said surface is adjacent to said body member, said surface including an abrasive grit attached thereto, wherein said abrasive grit is operable for polishing of the optical lens, wherein said abrasive grit is present at a substantially level depth across the width of said surface; and (3) at least one pair of substantially adjacent swarf clearing grooves formed in said surface, comprising: (i) a first swarf clearing groove extending at an angle across said surface; and (2) a second swarf clearing groove extending at an angle across said surface, wherein said first and second swarf clearing grooves are angled either towards each other or away from each other and extend continuously across said surface, wherein said first and second swarf clearing grooves are operable to remove swarf during a polishing cutting operation of the optical lens.

In the interests of expediting the prosecution, and without admission that any amendment is necessary, the Applicant has amended claim 29 to recite, a method for rough cutting of an optical lens, comprising: (1) providing an edging wheel, comprising: (i) a hub portion operable for attachment to a rotary power source, wherein said hub portion includes a substantially solid body member; (ii) an outer circumferential rough cutting surface having a width, wherein said surface is adjacent to said body member,

said surface including an abrasive grit attached thereto, wherein said abrasive grit is operable for rough cutting of the optical lens, wherein said abrasive grit is present at a substantially level depth across the width of said surface; and (iii) at least one pair of substantially adjacent swarf clearing grooves formed in said surface, comprising: (a) a first swarf clearing groove extending at an angle across said surface; and (b) a second swarf clearing groove extending at an angle across said surface, wherein said first and second swarf clearing grooves are angled either towards each other or away from each other and extend continuously across said surface, wherein said first and second swarf clearing grooves are operable to remove swarf during a rough cutting operation of the optical lens; (2) selectively rotating said edging wheel; and (3) bringing the optical lens into selective contact with said rotating edging wheel.

In the interests of expediting the prosecution, and without admission that any amendment is necessary, the Applicant has amended claim 31 to recite, a method for polishing of an optical lens, comprising: (1) providing a rotary edging wheel, comprising: (i) a hub portion operable for attachment to a rotary power source, wherein said hub portion includes a substantially solid body member; (ii) an outer circumferential cutting surface having a width, wherein said surface is adjacent to said body member, said surface including an abrasive grit attached thereto, wherein said abrasive grit is operable for polishing of the optical lens, wherein said abrasive grit is present at a substantially level depth across the width of said surface; and (iii) at least one pair of substantially adjacent swarf clearing grooves formed in said surface, comprising: (a) a first swarf clearing groove extending at an angle across said surface; and (b) a second swarf clearing groove extending at an angle across said surface, wherein said first and

second swarf clearing grooves are angled either towards each other or away from each other and extend continuously across said surface, wherein said first and second swarf clearing grooves are operable to remove swarf during a polishing operation of the optical lens; (2) selectively rotating said edging wheel; and (3) bringing the optical lens into selective contact with said rotating edging wheel.

Neither Videcoq et al. and/or Robichon, either alone or in combination therewith, suggests such structure and/or methodology as recited in either claims 1, 15, 29 or 31.

In contradistinction to the claimed invention, Videcoq et al. discloses that the abrasive layer 3 is formed on the surface of the body 2 so as to form a convex surface, i.e., the “middle” portion of the abrasive grit bulges outwardly from the surface of the body. As Figs. 2, 5, 7, 10, 12, 15, 17, 20, 22, 25, 27, 30, 32, 35, 37, 40, 42, 45, 47, 50, 52, 55, 57, 60, 62, 65, 67, 70, 72, 75, 77, 80, 82, 85, 87, 90, 92, 95, 97, and 100 of the instant application clearly illustrate, the abrasive layer is present at a substantially level depth across the width of the cutting surface, i.e., there are no bulges present. Additionally, as the Examiner correctly noted, Videcoq et al. also fail to disclose at least one pair of grooves formed in the surface comprising a first groove extending at an angle across the surface, a second groove extending at an angle across the surface, wherein the first and second grooves are angled either towards each other or away from each other and extend continuously across the surface.

The recitation of Robichon does not cure the deficiencies in the disclosure of Videcoq et al. In fact, Robichon appears to teach away from Videcoq et al. in that it discloses a hub portion having a series of fluid passages formed in a body member thereof. Robichon also appears to teach away from Videcoq et al. in that the abrasive

deposit 10 appears to be substantially planar, i.e., there does not appear to be a bulging middle portion. Robichon also fails to disclose the use of swarf clearing grooves, i.e., the grooves taught by Robichon are not intended to remove swarf, but rather are intended to ensure uniform cooling fluid distribution (see column 3, lines 35-41) for high temperature metal grinding applications. In fact, the presence of any significant amount of cooling fluid such as oil, would probably interfere with the removal of any swarf, even if it was present, due to presumed caking and clumping of the resulting mixture. Furthermore, Robichon is directed to high temperature grinding operations, hence the need for the cooling fluid and passages for delivering the same, whereas the present invention is directed towards low temperature rough cutting and polishing operations for lens materials, wherein swarf removal is the primary concern.

Thus, one of ordinary skill in the art would not look to Videcoq et al. and/or Robichon, either alone or in combination therewith, for guidance on constructing a rotary edging wheel for rough cutting or polishing of an optical lens, as presently claimed.

Accordingly, neither Videcoq et al. and/or Robichon, either alone or in combination therewith, renders claims 1, 15, 29, or 31 obvious. Furthermore, claims 6 and 20, dependent upon claims 1 and 15, respectively, are likewise not rendered obvious by Videcoq et al. and/or Robichon, either alone or in combination therewith.

Therefore, the Applicant submits that the 35 USC §103(a) rejection of claims 1, 6, 15, 20, 29 and 31 has been overcome.

35 USC §103(a) REJECTION

Claims 3-5 and 17-19 stand rejected under 35 USC §103(a) as being unpatentable by 5,951,381 to Videcoq et al. in view of U.S. Patent No. 5,846,125 to Robichon.

The Applicants respectfully traverse the 35 USC §103(a) rejection of claims 3-5 and 17-19.

Because claims 1 and 15 are allowable over Videcoq et al. and/or Robichon, either alone or in combination therewith, for at least the reasons set forth above, claims 3-5 and 17-19, which depend from and further define independent claims 1 and 15, respectively, are likewise allowable.

Accordingly, Videcoq et al. and/or Robichon, either alone or in combination therewith, do not render claims 3-5 and 17-19 obvious.

Therefore, the Applicant submits that the 35 USC §103(a) rejection of claims 3-5 and 17-19 has been overcome.

35 USC §103(a) REJECTION

Claims 7 and 21 stand rejected under 35 USC §103(a) as being anticipated by U.S. Patent No. 5,846,125 to Robichon in view of U.S. Patent No. 6,047,278 to Wu et al.

The Applicants respectfully traverse the 35 USC §103(a) rejection of claims 7 and 21.

As previously noted, neither Videcoq et al. and/or Robichon, either alone or in combination therewith, suggest any such structure as recited in independent claims 1 and/or 15.

Accordingly, the Applicants submit that claims 1 and 15 are allowable over Robichon and Wu, either alone or in combination therewith.

Because claim 1 is allowable over Robichon and Wu, either alone or in combination therewith, claim 7, which further defines claim 1, is likewise allowable. Because claim 15 is allowable over Robichon and Wu, either alone or in combination therewith, claim 21, which further defines claim 15, is likewise allowable.

The recitation of Wu does not cure the deficiencies in the teachings of Videcoq et al. and/or Robichon. While Wu may arguably suggest that cubic boron nitride and diamond are well known superabrasives, it does not suggest the use of swarf clearing grooves whatsoever, least of all as presently claimed. Accordingly, one of ordinary skill in the art would not look to Videcoq et al., Robichon and/or Wu, either alone or in combination therewith, for guidance on constructing a rotary edging wheel for rough cutting or polishing of an optical lens, as presently claimed.

Because claims 1 and 15 are allowable over Videcoq et al., Robichon and/or Wu, either alone or in combination therewith, for at least the reasons set forth above, claims 7 and 21, which depend from and further define independent claims 1 and 15, respectively, are likewise allowable.

Accordingly, Videcoq et al., Robichon and/or Wu, either alone or in combination therewith, do not render claims 7 and 21 obvious.

Therefore, the Applicant submits that the 35 USC §103(a) rejection of claims 7 and 21 has been overcome.

CONCLUSION

In view of the foregoing, the Applicant respectfully requests reconsideration and reexamination of the Application. The Applicant respectfully submits that each item raised by the Examiner in the Office Action of August 18, 2005 has been successfully traversed, overcome or rendered moot by this response. The Applicant respectfully submits that each of the claims in this Application is in condition for allowance and such allowance is earnestly solicited.

The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 364-4300 if any unresolved matters remain. Any needed extension of time is hereby requested with the filing of this document. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 501612. A duplicate copy of this letter is enclosed herewith.

Respectfully submitted,

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